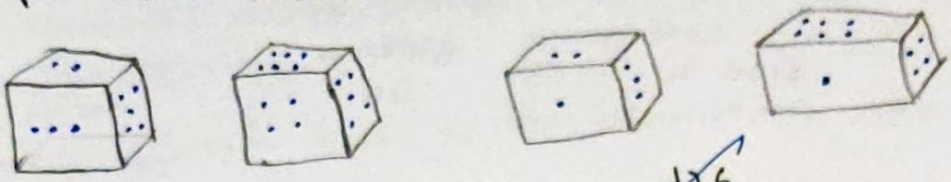
CUBES AND CUBOID

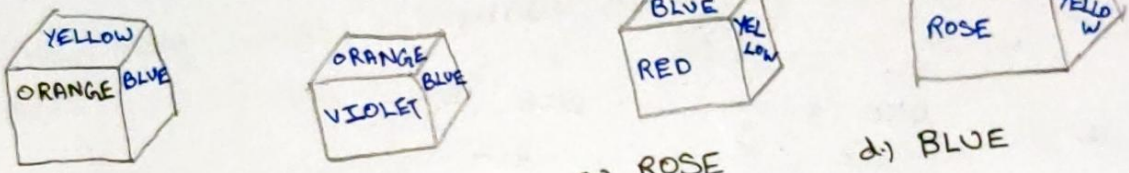
L. VALLIAPPAN
39111054
19811355

1.) How many points will be on the face opposite to in face which contains 2 points



a.) 1 b) 5 c.) 4 d) 6

2.) From the four positions of a dice given below, find the color which is opposite to yellow?

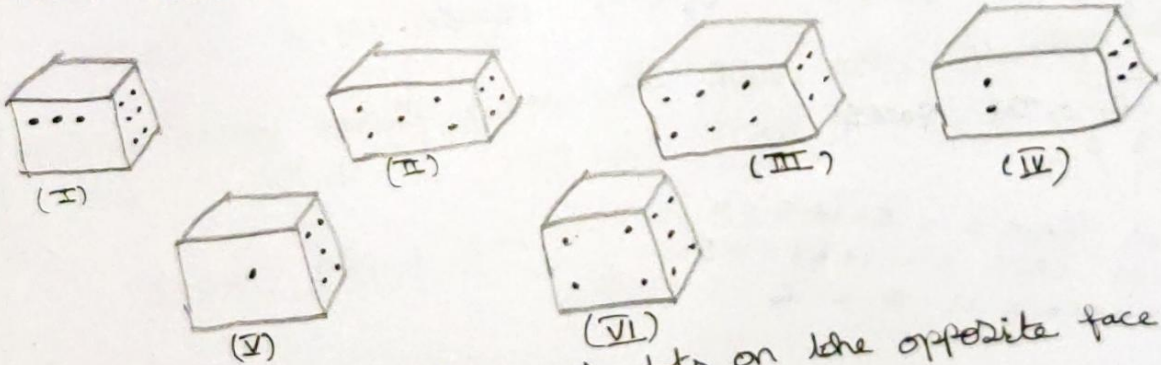


a.) VIOLET b.) RED c.) ROSE d.) BLUE

3.) Two positions of a dice are shown below. Which number will appear on the face opposite to the face with the number 5?

a.) 2/6
b) 3
c.) 6
d.) 4

Directions for question 4 to 6: Six dice with upper faces erased are as shows.



The sum of the numbers of dots on the opposite face is 7.

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19511355

4.) If even numbered dice have even number of dots on their top faces, then what would be the total number of dots on the top faces of their dice?

a.) 12 b.) 14 c.) 18 d.) 24

Dice 2
1,6

Dice 4
1,6

Dice 6
1,6

6 + 6 + 6 = 18

5.) If the odd numbered dice have even number of dots on their top faces, then what would be the total number of dots on the top faces of their dice?

a.) 8 b.) 10 c.) 12 d.) 14

Dice 1
2,5

Dice 3
2,5

Dice 5
3,4

2 + 2 + 4 = 8

6.) If dice (I), (II), and (III) have even number of dots on their bottom faces and the dice (IV), (V) and (VI) have odd number of dots on their top faces, then what would be the difference in the total number of top faces between these two sets?

a.) 0 b.) 2 c.) 4 d.) 6

CASE 1 ⇒

D1 = 2
D2 = 6 } → Bottom Face ⇒ D1 = 5
D3 = 2 D2 = 1 } → Top faces.
D3 = 5

CASE 2

D4 = 1
D5 = 3 } → Top faces.
D6 = 1

Sum of CASE 1 = 5 + 1 + 5 = 11
Sum of CASE 2 = 1 + 3 + 1 = 5
Difference = 11 − 5 = 6.

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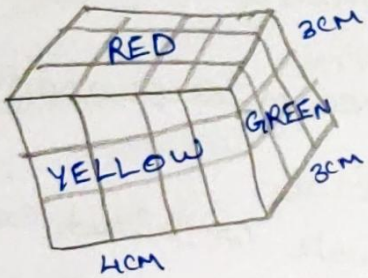
Direction for questions 7 to 10: The following questions are based on the information given below.

* There is a cuboid whoose dimensions are 4×3×3 cm.
* The opposite faces of dimensions 4×3 are coloured yellow.
* The opposite faces of other dimensions 4×3 are coloured Red.
* The opposite faces of dimensions are 3×3 are coloured green.
* Now the cuboid is cut into small cubes of side 1cm.

7.) How many small cubes will have only two faces coloured?

a.) 12 b.) 24 c.) 16 d.) 14



6 front + 6 back + 2 left + 2 right

= 14

8.) How many Small cubes have three faces coloured?

a.) 24 b.) 20 c.) 16 d.) 8

9.) How many small cubes will have no face colored?

a.) 1 b.) 2 c.) 4 d.) 8

(4-2) × (3-2) (3-2) = 2 × 1 × 1 = 4

10.) How many small cubes will have only one face coloured.

a.) 10 b.) 12 c.) 14 d.) 18

2×2 + 2×2 + 2×1

4+4+2

10